Civil Engineering Database Subject Heading Index

The **Civil Engineering Database (CEDB)** is designed to provide free, easy bibliographic access to all ASCE publications. The database covers ASCE documents published since 1970. It provides access to all the journals, conference proceedings, books, standards, manuals, magazines, and newspapers. The index terms below were assigned to papers published in this journal during 2007 from a CEDB subject heading list. The CEDB and subject heading list can be accessed on the Web at *http://cedb.asce.org/*.

Africa

Consideration of Climate Variability and Change in Agricultural Water Resources Planning — Kelly Brumbelow and Aris Georgakakos; 133 (3), 275-85 (2007).

Managing Drought Impacts: Case Study of Mali, Africa — Zan N'Tio Traore and Darrell G. Fontane; 133 (4), 300-8 (2007).

Agriculture

Simulation of Intra- or Transboundary Surface-Water-Rights Hierarchies Using the Farm Process for MODFLOW-2000 — Wolfgang Schmid and R. T. Hanson; 133 (2), 166-78 (2007).

Optimization and Assessment of Agricultural Water-Sharing Scenarios under Multiple Socioeconomic Objectives — Kelly Brumbelow and Aris Georgakakos; 133 (3), 264-74 (2007).

Consideration of Climate Variability and Change in Agricultural Water Resources Planning — Kelly Brumbelow and Aris Georgakakos; 133 (3), 275-85 (2007).

Algorithms

Ant Colony Optimization Applied to Water Distribution System Design: Comparative Study of Five Algorithms — Aaron C. Zecchin, Holger R. Maier, Angus R. Simpson, Michael Leonard, and John B. Nixon; 133 (1), 87-92 (2007).

Calibration and Verification of QUAL2E Using Genetic Algorithm Optimization — Recep Kaya Goktas and Aysegul Aksoy; 133 (2), 126-36 (2007).

Generating Alternatives Using Evolutionary Algorithms for Water Resources and Environmental Management Problems — Emily M. Zechman and Ranji S. Ranjithan; 133 (2), 156-65 (2007).

Direct Search Approaches Using Genetic Algorithms for Optimization of Water Reservoir Operating Policies — Sh. Momtahen and A. B. Dariane; 133 (3), 202-9 (2007).

Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).

Calibrating Pipe Wall Demand Coefficient for Chlorine Decay in Water Distribution System — Feng Shang and James G. Uber; 133 (4), 363-71 (2007).

Multiobjective Planning of Surface Water Resources by Multiobjective Genetic Algorithm with Constrained Differential Dynamic Programming — Chao-Chung Yang, Liang-Cheng Chang, Chao-Hsien Yeh, and Chang-Shian Chen; 133 (6), 499-508 (2007).

Allocation

Mathematical Programming Approaches for Modeling Water Rights Allocation — Lizhong Wang, Liping Fang, and Keith W. Hipel; 133 (1), 50-9 (2007).

Artificial intelligence

Stochastic Fuzzy Neural Network: Case Study of Optimal Reservoir Operation — Paulo Chaves and Toshiharu Kojiri; 133 (6), 509-18 (2007).

Asia

Strategic Decision Support for Resolving Conflict over Water Sharing among Countries along the Syr Darya River in the Aral Sea Basin — K. D. W. Nandalal and K. W. Hipel; 133 (4), 289-99 (2007).

Assessments

Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).

Australia

Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).

Bacteria

PhillyRiverCast: A Real-Time Bacteria Forecasting Model and Web Application for the Schuylkill River — Mark Maimone, Christopher S. Crockett, and William E. Cesanek; 133 (6), 542-9 (2007).

Bangladesh

Evaluation of Risk-Related Performance in Water Management for the Ganges Delta of Bangladesh — M. Shahjahan Mondal and Saleh A. Wasimi; 133 (2), 179-87 (2007).

Calibration

Calibration and Verification of QUAL2E Using Genetic Algorithm Optimization — Recep Kaya Goktas and Aysegul Aksoy; 133 (2), 126-36 (2007).

Case reports

Managing Drought Impacts: Case Study of Mali, Africa — Zan N'Tio Traore and Darrell G. Fontane; 133 (4), 300-8 (2007).

Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).

Stochastic Fuzzy Neural Network: Case Study of Optimal Reservoir Operation — Paulo Chaves and Toshiharu Kojiri; 133 (6), 509-18 (2007).

Chlorine

Calibrating Pipe Wall Demand Coefficient for Chlorine Decay in Water Distribution System — Feng Shang and James G. Uber; 133 (4), 363-71 (2007).

Climatic changes

Vulnerability of Drinking Water Treatment Plants to Low Water Levels in the St. Lawrence River — A. Carrière, B. Barbeau, and J.-F. Cantin; 133 (1), 33-8 (2007).

Using Neural Networks to Model the Impacts of Climate Change on Water Supplies — E. Elgaali and L. A. Garcia; 133 (3), 230-43 (2007).

Consideration of Climate Variability and Change in Agricultural Water Resources Planning — Kelly Brumbelow and Aris Georgakakos; 133 (3), 275-85 (2007).

Impact of Climate Change on Transboundary Water Sharing — Stephen E. Draper and James E. Kundell; 133 (5), 405-15 (2007).

Climatology

Water Management Applications of Climate-Based Hydrologic Forecasts: Case Study of the Truckee-Carson River Basin — Katrina Grantz, Balaji Rajagopalan, Edith Zagona, and Martyn Clark; 133 (4), 339-50 (2007).

Coefficients

Calibrating Pipe Wall Demand Coefficient for Chlorine Decay in Water Distribution System — Feng Shang and James G. Uber; 133 (4), 363-71 (2007).

Colorado

Using Neural Networks to Model the Impacts of Climate Change on Water Supplies — E. Elgaali and L. A. Garcia; 133 (3), 230-43 (2007).

Colorado River

Water Supply Analysis for Restoring the Colorado River Delta, Mexico — Josué Medellín-Azuara, Jay R. Lund, and Richard E. Howitt; 133 (5), 462-71 (2007).

Computation

Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).

Computer software

Planning for Water Allocation and Water Quality Using a Spreadsheet-Based Model — Garry L. Grabow and Peter G. McCornick; 133 (6), 560-4 (2007).

Conflict resolution

Boundaries and Transboundary Water Conflicts — Olen Paul Matthews and Dan St. Germain; 133 (5), 386-96 (2007).

Conflicts
Water and Conflict: Historical Perspective — Don Phelps; 133 (5), 382-5 (2007).
North Carolina–Virginia Conflict: The Lake Gaston Water Transfer — William E. Cox; 133 (5), 456-61 (2007).

Conservation
Probabilistic Estimation of Water Conservation Effectiveness — David E. Rosenberg; 133 (1), 39-49 (2007).

Construction costs
Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).

Correlation
Cross Correlation of Demands in Water Distribution Network Design — Yves Filion, Barry Adams, and Bryan Karney; 133 (2), 137-44 (2007).

Crops
Optimization and Assessment of Agricultural Water-Sharing Scenarios under Multiple Socioeconomic Objectives — Kelly Brumbelow and Aris Georgakakos; 133 (3), 264-74 (2007).
Consideration of Climate Variability and Change in Agricultural Water Resources Planning — Kelly Brumbelow and Aris Georgakakos; 133 (3), 275-85 (2007).

Damage
Stochastic Design of Water Distribution Systems with Expected Annual Damages — Y. R. Filion, B. J. Adams, and B. W. Karney; 133 (3), 244-52 (2007).

Databases
Sharing Water Resources Data in the Binational Rio Grande/Bravo Basin — Carlos Patiño-Gomez, Daene C. McKinney, and David R. Maidment; 133 (5), 416-26 (2007).

Decay
Calibrating Pipe Wall Demand Coefficient for Chlorine Decay in Water Distribution System — Feng Shang and James G. Uber; 133 (4), 363-71 (2007).

Decision support systems
Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).
Influence of Inflows Modeling on Management Simulation of Water Resources System — J. C. Ochoa-Rivera, J. Andreu, and R. García-Bartual; 133 (2), 106-16 (2007).
Optimization and Assessment of Agricultural Water-Sharing Scenarios under Multiple Socioeconomic Objectives — Kelly Brumbelow and Aris Georgakakos; 133 (3), 264-74 (2007).
Strategic Decision Support for Resolving Conflict over Water Sharing among Countries along the Syr Darya River in the Aral Sea Basin — K. D. W. Nandalal and K. W. Hipel; 133 (4), 289-99 (2007).
Water Management Applications of Climate-Based Hydrologic Forecasts: Case Study of the Truckee-Carson River Basin — Katrina Grantz, Balaji Rajagopalan, Edith Zagona, and Martyn Clark; 133 (4), 339-50 (2007).

Design
Cross Correlation of Demands in Water Distribution Network Design — Yves Filion, Barry Adams, and Bryan Karney; 133 (2), 137-44 (2007).
Stochastic Design of Water Distribution Systems with Expected Annual Damages — Y. R. Filion, B. J. Adams, and B. W. Karney; 133 (3), 244-52 (2007).

Disinfection
Locating Satellite Booster Disinfectant Stations — Kevin Lansey, Fayzul Pasha, Sheina Pool, Walid Elshorbagy, and James Uber; 133 (4), 372-6 (2007).

Dispute resolution
Administration and Institutional Provisions of Water Sharing Agreements — Stephen E. Draper; 133 (5), 446-55 (2007).

Droughts
Managing Drought Impacts: Case Study of Mali, Africa — Zan N'Tio Traore and Darrell G. Fontane; 133 (4), 300-8 (2007).
Drought Management Planning with Economic and Risk Factors — Kirk S. Westphal, Richard L. Laramie, Douglas Borgatti, and Robert Stoops; 133 (4), 351-62 (2007).

Economic factors
Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).
Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).
Drought Management Planning with Economic and Risk Factors — Kirk S. Westphal, Richard L. Laramie, Douglas Borgatti, and Robert Stoops; 133 (4), 351-62 (2007).

Endangered species
Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).

Environmental issues
Generating Alternatives Using Evolutionary Algorithms for Water Resources and Environmental Management Problems — Emily M. Zechman and Ranji S. Ranjithan; 133 (2), 156-65 (2007).
Water Supply Analysis for Restoring the Colorado River Delta, Mexico — Josué Medellín-Azuara, Jay R. Lund, and Richard E. Howitt; 133 (5), 462-71 (2007).
Water Use Model for Quantifying Environmental and Economic Sustainability Indicators — Halla R. Sahely and Christopher A. Kennedy; 133 (6), 550-9 (2007).

Errors
Experimental Observation and Analysis of Inverse Transients for Pipeline Leak Detection — John P. Vítkovský, Martin F. Lambert, Angus R. Simpson, and James A. Liggett; 133 (6), 519-30 (2007).

Evolutionary computation
Calibration and Verification of QUAL2E Using Genetic Algorithm Optimization — Recep Kaya Goktas and Aysegul Aksoy; 133 (2), 126-36 (2007).
Direct Search Approaches Using Genetic Algorithms for Optimization of Water Reservoir Operating Policies — Sh. Momtahen and A. B. Dariane; 133 (3), 202-9 (2007).

Failures
Valve-Controlled Segments in Water Distribution Systems — Hwandon Jun and G. V. Loganathan; 133 (2), 145-55 (2007).

Forecasting
Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).
Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).
Water Management Applications of Climate-Based Hydrologic Forecasts: Case Study of the Truckee-Carson River Basin — Katrina Grantz, Balaji Rajagopalan, Edith Zagona, and Martyn Clark; 133 (4), 339-50 (2007).
PhillyRiverCast: A Real-Time Bacteria Forecasting Model and Web Application for the Schuylkill River — Mark Maimone, Christopher S. Crockett, and William E. Cesanek; 133 (6), 542-9 (2007).

France
Integrated Water Resource Management and Water Sharing — Matthew D. Davis; 133 (5), 427-45 (2007).

Fuzzy sets
Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).
Stochastic Fuzzy Neural Network: Case Study of Optimal Reservoir Operation — Paulo Chaves and Toshiharu Kojiri; 133 (6), 509-18 (2007).

Geographic information system
Sharing Water Resources Data in the Binational Rio Grande/Bravo Basin — Carlos Patiño-Gomez, Daene C. McKinney, and David R. Maidment; 133 (5), 416-26 (2007).

Government
Water Resources Management: Stewardship and Services — Harald D. Frederiksen; 133 (1), 15-22 (2007).

Ground water
Simulation of Intra- or Transboundary Surface-Water-Rights Hierarchies Using the Farm Process for MODFLOW-2000 — Wolfgang Schmid and R. T. Hanson; 133 (2), 166-78 (2007).

Ground-water management
Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).
Stochastically Optimal Groundwater Management Considering Land Subsidence — Yin-Lung Chang, Tung-Lin Tsai, Jinn-Chuang Yang, and Yeou-Koung Tung; 133 (6), 486-98 (2007).

Ground-water pollution
Multiobjective Design of Dynamic Monitoring Networks for Detection of Groundwater Pollution — Anirban Dhar and Bithin Datta; 133

(4), 329-38 (2007).

History

Water and Conflict: Historical Perspective — Don Phelps; 133 (5), 382-5 (2007).

Hydraulic structures

Water Sector Structure, Size, and Demographics — Neil S. Grigg; 133 (1), 60-6 (2007).

Hydroelectric power generation

Multipurpose Reservoir Operation Using Particle Swarm Optimization — D. Nagesh Kumar and M. Janga Reddy; 133 (3), 192-201 (2007).

Hydrologic models

Multilayer Control Hierarchy for Water Management Decisions in Integrated Hydrologic Simulation Model — Joseph Park, Jayantha Obeysekera, and Randy VanZee; 133 (2), 117-25 (2007).

Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).

Hydrology

Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).

Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).

Inflow

Influence of Inflows Modeling on Management Simulation of Water Resources System — J. C. Ochoa-Rivera, J. Andreu, and R. García-Bartual; 133 (2), 106-16 (2007).

Instream flow

Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).

Intakes

Vulnerability of Drinking Water Treatment Plants to Low Water Levels in the St. Lawrence River — A. Carrière, B. Barbeau, and J.-F. Cantin; 133 (1), 33-8 (2007).

Simulation of Operations and Water Quality Performance of Reservoir Multilevel Intake Configurations — Rakesh K. Gelda and Steven W. Effler; 133 (1), 78-86 (2007).

Integrated systems

Integrated Water Resource Management and Water Sharing — Matthew D. Davis; 133 (5), 427-45 (2007).

Planning for Water Allocation and Water Quality Using a Spreadsheet-Based Model — Garry L. Grabow and Peter G. McCornick; 133 (6), 560-4 (2007).

International factors

Strategic Decision Support for Resolving Conflict over Water Sharing among Countries along the Syr Darya River in the Aral Sea Basin — K. D. W. Nandalal and K. W. Hipel; 133 (4), 289-99 (2007).

International waters

Optimization and Assessment of Agricultural Water-Sharing Scenarios under Multiple Socio-economic Objectives — Kelly Brumbelow and Aris Georgakakos; 133 (3), 264-74 (2007).

Boundaries and Transboundary Water Conflicts — Olen Paul Matthews and Dan St. Germain; 133 (5), 386-96 (2007).

Irrigation

Simulation of Intra- or Transboundary Surface-Water-Rights Hierarchies Using the Farm Process for MODFLOW-2000 — Wolfgang Schmid and R. T. Hanson; 133 (2), 166-78 (2007).

Multipurpose Reservoir Operation Using Particle Swarm Optimization — D. Nagesh Kumar and M. Janga Reddy; 133 (3), 192-201 (2007).

Optimization and Assessment of Agricultural Water-Sharing Scenarios under Multiple Socio-economic Objectives — Kelly Brumbelow and Aris Georgakakos; 133 (3), 264-74 (2007).

Consideration of Climate Variability and Change in Agricultural Water Resources Planning — Kelly Brumbelow and Aris Georgakakos; 133 (3), 275-85 (2007).

Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).

Irrigation water

Using Neural Networks to Model the Impacts of Climate Change on Water Supplies — E. Elgaali and L. A. Garcia; 133 (3), 230-43 (2007).

Jordan

Probabilistic Estimation of Water Conservation Effectiveness — David E. Rosenberg; 133 (1), 39-49 (2007).

Kinetics

Locating Satellite Booster Disinfectant Stations — Kevin Lansey, Fayzul Pasha, Sheina Pool, Walid Elshorbagy, and James Uber; 133 (4), 372-6 (2007).

Korea

Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).

Lakes

North Carolina–Virginia Conflict: The Lake Gaston Water Transfer — William E. Cox; 133 (5), 456-61 (2007).

Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).

Laws

Transboundary Water Sharing and the Need for Public Management — Joseph W. Dellapenna; 133 (5), 397-404 (2007).

Leakage

Experimental Observation and Analysis of Inverse Transients for Pipeline Leak Detection — John P. Vítkovský, Martin F. Lambert, Angus R. Simpson, and James A. Liggett; 133 (6), 519-30 (2007).

Maintenance costs

Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).

Markov chains

Stochastic Fuzzy Neural Network: Case Study of Optimal Reservoir Operation — Paulo Chaves and Toshiharu Kojiri; 133 (6), 509-18 (2007).

Mathematics

Mathematical Programming Approaches for Modeling Water Rights Allocation — Lizhong Wang, Liping Fang, and Keith W. Hipel; 133 (1), 50-9 (2007).

Mexico

Water Supply Analysis for Restoring the Colorado River Delta, Mexico — Josué Medellín-Azuara, Jay R. Lund, and Richard E. Howitt; 133 (5), 462-71 (2007).

Models

Calibration and Verification of QUAL2E Using Genetic Algorithm Optimization — Recep Kaya Goktas and Aysegul Aksoy; 133 (2), 126-36 (2007).

Monitoring

Multiobjective Design of Dynamic Monitoring Networks for Detection of Groundwater Pollution — Anirban Dhar and Bithin Datta; 133 (4), 329-38 (2007).

Monte Carlo method

Probabilistic Estimation of Water Conservation Effectiveness — David E. Rosenberg; 133 (1), 39-49 (2007).

Multiple objective analysis

Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).

Multiobjective Planning of Surface Water Resources by Multiobjective Genetic Algorithm with Constrained Differential Dynamic Programming — Chao-Chung Yang, Liang-Cheng Chang, Chao-Hsien Yeh, and Chang-Shian Chen; 133 (6), 499-508 (2007).

Municipal water

Probabilistic Estimation of Water Conservation Effectiveness — David E. Rosenberg; 133 (1), 39-49 (2007).

Implementation of Pressure and Leakage Management Strategies on the Gold Coast, Australia: Case Study — Mark Girard and Rodney A. Stewart; 133 (3), 210-7 (2007).

North Carolina–Virginia Conflict: The Lake Gaston Water Transfer — William E. Cox; 133 (5), 456-61 (2007).

Neural networks

Influence of Inflows Modeling on Management Simulation of Water Resources System — J. C. Ochoa-Rivera, J. Andreu, and R. García-Bartual; 133 (2), 106-16 (2007).

Using Neural Networks to Model the Impacts of Climate Change on Water Supplies — E. Elgaali and L. A. Garcia; 133 (3), 230-43 (2007).

Stochastic Fuzzy Neural Network: Case Study of Optimal Reservoir Operation — Paulo Chaves and Toshiharu Kojiri; 133 (6), 509-18 (2007).

New York

Simulation of Operations and Water Quality Performance of Reservoir Multilevel Intake Configurations — Rakesh K. Gelda and Steven

W. Effler; 133 (1), 78-86 (2007).

Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).

North Carolina

North Carolina–Virginia Conflict: The Lake Gaston Water Transfer — William E. Cox; 133 (5), 456-61 (2007).

Operation costs

Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).

Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).

Optimization

Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).

Dynamic Optimization Approach for Solving an Optimal Scheduling Problem in Water Distribution Systems — B. Ulanicki, J. Kahler, and H. See; 133 (1), 23-32 (2007).

Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).

Ant Colony Optimization Applied to Water Distribution System Design: Comparative Study of Five Algorithms — Aaron C. Zecchin, Holger R. Maier, Angus R. Simpson, Michael Leonard, and John B. Nixon; 133 (1), 87-92 (2007).

Calibration and Verification of QUAL2E Using Genetic Algorithm Optimization — Recep Kaya Goktas and Aysegul Aksoy; 133 (2), 126-36 (2007).

Multipurpose Reservoir Operation Using Particle Swarm Optimization — D. Nagesh Kumar and M. Janga Reddy; 133 (3), 192-201 (2007).

Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).

Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).

Multiobjective Design of Dynamic Monitoring Networks for Detection of Groundwater Pollution — Anirban Dhar and Bithin Datta; 133 (4), 329-38 (2007).

Stochastically Optimal Groundwater Management Considering Land Subsidence — Yin-Lung Chang, Tung-Lin Tsai, Jinn-Chuang Yang, and Yeou-Koung Tung; 133 (6), 486-98 (2007).

Optimization models

Mathematical Programming Approaches for Modeling Water Rights Allocation — Lizhong Wang, Liping Fang, and Keith W. Hipel; 133 (1), 50-9 (2007).

Direct Search Approaches Using Genetic Algorithms for Optimization of Water Reservoir Operating Policies — Sh. Momtahen and A. B. Dariane; 133 (3), 202-9 (2007).

Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).

Organizational policy

Water Resources Management: Stewardship and Services — Harald D. Frederiksen; 133 (1), 15-22 (2007).

Organizations

Administration and Institutional Provisions of Water Sharing Agreements — Stephen E. Draper; 133 (5), 446-55 (2007).

Pipe flow

Experimental Observation and Analysis of Inverse Transients for Pipeline Leak Detection — John P. Vítkovský, Martin F. Lambert, Angus R. Simpson, and James A. Liggett; 133 (6), 519-30 (2007).

Pipe networks

Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).

Valve-Controlled Segments in Water Distribution Systems — Hwandon Jun and G. V. Loganathan; 133 (2), 145-55 (2007).

Reliability-Based Strengthening and Expansion of Water Distribution Networks — Magan Lal Agrawal, Rajesh Gupta, and Pramod R. Bhave; 133 (6), 531-41 (2007).

Pipelines

Experimental Observation and Analysis of Inverse Transients for Pipeline Leak Detection — John P. Vítkovský, Martin F. Lambert, Angus R. Simpson, and James A. Liggett; 133 (6), 519-30 (2007).

Pipes

Calibrating Pipe Wall Demand Coefficient for Chlorine Decay in Water Distribution System — Feng Shang and James G. Uber; 133 (4), 363-71 (2007).

Political factors

Boundaries and Transboundary Water Conflicts — Olen Paul Matthews and Dan St. Germain; 133 (5), 386-96 (2007).

Potable water

Vulnerability of Drinking Water Treatment Plants to Low Water Levels in the St. Lawrence River — A. Carrière, B. Barbeau, and J.-F. Cantin; 133 (1), 33-8 (2007).

Precipitation

Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).

Predictions

Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).

Probability distribution

Probabilistic Estimation of Water Conservation Effectiveness — David E. Rosenberg; 133 (1), 39-49 (2007).

Pumps

Dynamic Optimization Approach for Solving an Optimal Scheduling Problem in Water Distribution Systems — B. Ulanicki, J. Kahler, and H. See; 133 (1), 23-32 (2007).

Regional planning

Optimization and Assessment of Agricultural Water-Sharing Scenarios under Multiple Socioeconomic Objectives — Kelly Brumbelow and Aris Georgakakos; 133 (3), 264-74 (2007).

Consideration of Climate Variability and Change in Agricultural Water Resources Planning — Kelly Brumbelow and Aris Georgakakos; 133 (3), 275-85 (2007).

Regression analysis

Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).

Regulations

North Carolina–Virginia Conflict: The Lake Gaston Water Transfer — William E. Cox; 133 (5), 456-61 (2007).

Reliability

Evaluation of Risk-Related Performance in Water Management for the Ganges Delta of Bangladesh — M. Shahjahan Mondal and Saleh A. Wasimi; 133 (2), 179-87 (2007).

Remedial action

Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).

Reservoir operation

Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).

Multipurpose Reservoir Operation Using Particle Swarm Optimization — D. Nagesh Kumar and M. Janga Reddy; 133 (3), 192-201 (2007).

Stochastic Fuzzy Neural Network: Case Study of Optimal Reservoir Operation — Paulo Chaves and Toshiharu Kojiri; 133 (6), 509-18 (2007).

Reservoirs

Simulation of Operations and Water Quality Performance of Reservoir Multilevel Intake Configurations — Rakesh K. Gelda and Steven W. Effler; 133 (1), 78-86 (2007).

Residential location

Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).

Restoration

Water Supply Analysis for Restoring the Colorado River Delta, Mexico — Josué Medellín-Azuara, Jay R. Lund, and Richard E. Howitt; 133 (5), 462-71 (2007).

Risk management
Evaluation of Risk-Related Performance in Water Management for the Ganges Delta of Bangladesh — M. Shahjahan Mondal and Saleh A. Wasimi; 133 (2), 179-87 (2007).

Drought Management Planning with Economic and Risk Factors — Kirk S. Westphal, Richard L. Laramie, Douglas Borgatti, and Robert Stoops; 133 (4), 351-62 (2007).

River basins
Water Resources Management: Stewardship and Services — Harald D. Frederiksen; 133 (1), 15-22 (2007).

Mathematical Programming Approaches for Modeling Water Rights Allocation — Lizhong Wang, Liping Fang, and Keith W. Hipel; 133 (1), 50-9 (2007).

Sharing Water Resources Data in the Binational Rio Grande/Bravo Basin — Carlos Patiño-Gomez, Daene C. McKinney, and David R. Maidment; 133 (5), 416-26 (2007).

North Carolina–Virginia Conflict: The Lake Gaston Water Transfer — William E. Cox; 133 (5), 456-61 (2007).

Planning for Water Allocation and Water Quality Using a Spreadsheet-Based Model — Garry L. Grabow and Peter G. McCornick; 133 (6), 560-4 (2007).

Rivers
Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).

Boundaries and Transboundary Water Conflicts — Olen Paul Matthews and Dan St. Germain; 133 (5), 386-96 (2007).

Rivers, Pennsylvania
PhillyRiverCast: A Real-Time Bacteria Forecasting Model and Web Application for the Schuylkill River — Mark Maimone, Christopher S. Crockett, and William E. Cesanek; 133 (6), 542-9 (2007).

Runoff
Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).

Satellites
Locating Satellite Booster Disinfectant Stations — Kevin Lansey, Fayzul Pasha, Sheina Pool, Walid Elshorbagy, and James Uber; 133 (4), 372-6 (2007).

Scheduling
Dynamic Optimization Approach for Solving an Optimal Scheduling Problem in Water Distribution Systems — B. Ulanicki, J. Kahler, and H. See; 133 (1), 23-32 (2007).

Simulation
Simulation of Operations and Water Quality Performance of Reservoir Multilevel Intake Configurations — Rakesh K. Gelda and Steven W. Effler; 133 (1), 78-86 (2007).

Simulation of Intra- or Transboundary Surface-Water-Rights Hierarchies Using the Farm Process for MODFLOW-2000 — Wolfgang Schmid and R. T. Hanson; 133 (2), 166-78 (2007).

Evaluation of Risk-Related Performance in Water Management for the Ganges Delta of Bangladesh — M. Shahjahan Mondal and Saleh A. Wasimi; 133 (2), 179-87 (2007).

Simulation models
Multilayer Control Hierarchy for Water Management Decisions in Integrated Hydrologic Simulation Model — Joseph Park, Jayantha Obeysekera, and Randy VanZee; 133 (2), 117-25 (2007).

Direct Search Approaches Using Genetic Algorithms for Optimization of Water Reservoir Operating Policies — Sh. Momtahen and A. B. Dariane; 133 (3), 202-9 (2007).

Planning for Water Allocation and Water Quality Using a Spreadsheet-Based Model — Garry L. Grabow and Peter G. McCornick; 133 (6), 560-4 (2007).

St. Lawrence River
Vulnerability of Drinking Water Treatment Plants to Low Water Levels in the St. Lawrence River — A. Carrière, B. Barbeau, and J.-F. Cantin; 133 (1), 33-8 (2007).

Stochastic models
Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).

Stochastically Optimal Groundwater Management Considering Land Subsidence — Yin-Lung Chang, Tung-Lin Tsai, Jinn-Chuang Yang, and Yeou-Koung Tung; 133 (6), 486-98 (2007).

Stochastic Fuzzy Neural Network: Case Study of Optimal Reservoir Operation — Paulo Chaves and Toshiharu Kojiri; 133 (6), 509-18 (2007).

Stochastic processes
Cross Correlation of Demands in Water Distribution Network Design — Yves Filion, Barry Adams, and Bryan Karney; 133 (2), 137-44 (2007).

Evaluation of Risk-Related Performance in Water Management for the Ganges Delta of Bangladesh — M. Shahjahan Mondal and Saleh A. Wasimi; 133 (2), 179-87 (2007).

Stochastic Design of Water Distribution Systems with Expected Annual Damages — Y. R. Filion, B. J. Adams, and B. W. Karney; 133 (3), 244-52 (2007).

Stormwater management
Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).

Streamflow
Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).

Water Management Applications of Climate-Based Hydrologic Forecasts: Case Study of the Truckee-Carson River Basin — Katrina Grantz, Balaji Rajagopalan, Edith Zagona, and Martyn Clark; 133 (4), 339-50 (2007).

Subsidence
Stochastically Optimal Groundwater Management Considering Land Subsidence — Yin-Lung Chang, Tung-Lin Tsai, Jinn-Chuang Yang, and Yeou-Koung Tung; 133 (6), 486-98 (2007).

Surface waters
Simulation of Intra- or Transboundary Surface-Water-Rights Hierarchies Using the Farm Process for MODFLOW-2000 — Wolfgang Schmid and R. T. Hanson; 133 (2), 166-78 (2007).

Multiobjective Planning of Surface Water Resources by Multiobjective Genetic Algorithm with Constrained Differential Dynamic Programming — Chao-Chung Yang, Liang-Cheng Chang, Chao-Hsien Yeh, and Chang-Shian Chen; 133 (6), 499-508 (2007).

Sustainable development
Implementation of Pressure and Leakage Management Strategies on the Gold Coast, Australia: Case Study — Mark Girard and Rodney A. Stewart; 133 (3), 210-7 (2007).

Managing Drought Impacts: Case Study of Mali, Africa — Zan N'Tio Traore and Darrell G. Fontane; 133 (4), 300-8 (2007).

Integrated Water Resource Management and Water Sharing — Matthew D. Davis; 133 (5), 427-45 (2007).

Water Use Model for Quantifying Environmental and Economic Sustainability Indicators — Halla R. Sahely and Christopher A. Kennedy; 133 (6), 550-9 (2007).

System reliability
Reliability-Based Strengthening and Expansion of Water Distribution Networks — Magan Lal Agrawal, Rajesh Gupta, and Pramod R. Bhave; 133 (6), 531-41 (2007).

Texas
Sharing Water Resources Data in the Binational Rio Grande/Bravo Basin — Carlos Patiño-Gomez, Daene C. McKinney, and David R. Maidment; 133 (5), 416-26 (2007).

Time series analysis
Influence of Inflows Modeling on Management Simulation of Water Resources System — J. C. Ochoa-Rivera, J. Andreu, and R. García-Bartual; 133 (2), 106-16 (2007).

Uncertainty principles
Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).

Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).

Unsteady flow
Experimental Observation and Analysis of Inverse Transients for Pipeline Leak Detection — John P. Vítkovský, Martin F. Lambert, Angus R. Simpson, and James A. Liggett; 133 (6), 519-30 (2007).

Urban areas
Water Use Model for Quantifying Environmental and Economic Sustainability Indicators — Halla R. Sahely and Christopher A. Kennedy; 133 (6), 550-9 (2007).

Valves
Valve-Controlled Segments in Water Distribution

Systems — Hwandon Jun and G. V. Loganathan; 133 (2), 145-55 (2007).

Verification

Calibration and Verification of QUAL2E Using Genetic Algorithm Optimization — Recep Kaya Goktas and Aysegul Aksoy; 133 (2), 126-36 (2007).

Virginia

North Carolina–Virginia Conflict: The Lake Gaston Water Transfer — William E. Cox; 133 (5), 456-61 (2007).

Water demand

Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).

Water Use Model for Quantifying Environmental and Economic Sustainability Indicators — Halla R. Sahely and Christopher A. Kennedy; 133 (6), 550-9 (2007).

Water discharge

Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).

Water distribution systems

Dynamic Optimization Approach for Solving an Optimal Scheduling Problem in Water Distribution Systems — B. Ulanicki, J. Kahler, and H. See; 133 (1), 23-32 (2007).

Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).

Ant Colony Optimization Applied to Water Distribution System Design: Comparative Study of Five Algorithms — Aaron C. Zecchin, Holger R. Maier, Angus R. Simpson, Michael Leonard, and John B. Nixon; 133 (1), 87-92 (2007).

Cross Correlation of Demands in Water Distribution Network Design — Yves Filion, Barry Adams, and Bryan Karney; 133 (2), 137-44 (2007).

Valve-Controlled Segments in Water Distribution Systems — Hwandon Jun and G. V. Loganathan; 133 (2), 145-55 (2007).

Stochastic Design of Water Distribution Systems with Expected Annual Damages — Y. R. Filion, B. J. Adams, and B. W. Karney; 133 (3), 244-52 (2007).

Calibrating Pipe Wall Demand Coefficient for Chlorine Decay in Water Distribution System — Feng Shang and James G. Uber; 133 (4), 363-71 (2007).

Reliability-Based Strengthening and Expansion of Water Distribution Networks — Magan Lal Agrawal, Rajesh Gupta, and Pramod R. Bhave; 133 (6), 531-41 (2007).

Water law

Water Resources Management: Stewardship and Services — Harald D. Frederiksen; 133 (1), 15-22 (2007).

Water levels

Vulnerability of Drinking Water Treatment Plants to Low Water Levels in the St. Lawrence River — A. Carrière, B. Barbeau, and J.-F. Cantin; 133 (1), 33-8 (2007).

Water management

Probabilistic Estimation of Water Conservation Effectiveness — David E. Rosenberg; 133 (1), 39-49 (2007).

Water Sector Structure, Size, and Demographics — Neil S. Grigg; 133 (1), 60-6 (2007).

Multilayer Control Hierarchy for Water Management Decisions in Integrated Hydrologic Simulation Model — Joseph Park, Jayantha Obeysekera, and Randy VanZee; 133 (2), 117-25 (2007).

Generating Alternatives Using Evolutionary Algorithms for Water Resources and Environmental Management Problems — Emily M. Zechman and Ranji S. Ranjithan; 133 (2), 156-65 (2007).

Evaluation of Risk-Related Performance in Water Management for the Ganges Delta of Bangladesh — M. Shahjahan Mondal and Saleh A. Wasimi; 133 (2), 179-87 (2007).

Water Management Applications of Climate-Based Hydrologic Forecasts: Case Study of the Truckee-Carson River Basin — Katrina Grantz, Balaji Rajagopalan, Edith Zagona, and Martyn Clark; 133 (4), 339-50 (2007).

Water and Conflict: Historical Perspective — Don Phelps; 133 (5), 382-5 (2007).

Transboundary Water Sharing and the Need for Public Management — Joseph W. Dellapenna; 133 (5), 397-404 (2007).

Sharing Water Resources Data in the Binational Rio Grande/Bravo Basin — Carlos Patiño-Gomez, Daene C. McKinney, and David R. Maidment; 133 (5), 416-26 (2007).

Integrated Water Resource Management and Water Sharing — Matthew D. Davis; 133 (5), 427-45 (2007).

Administration and Institutional Provisions of Water Sharing Agreements — Stephen E. Draper; 133 (5), 446-55 (2007).

Water pipelines

Implementation of Pressure and Leakage Management Strategies on the Gold Coast, Australia: Case Study — Mark Girard and Rodney A. Stewart; 133 (3), 210-7 (2007).

Calibrating Pipe Wall Demand Coefficient for Chlorine Decay in Water Distribution System — Feng Shang and James G. Uber; 133 (4), 363-71 (2007).

Reliability-Based Strengthening and Expansion of Water Distribution Networks — Magan Lal Agrawal, Rajesh Gupta, and Pramod R. Bhave; 133 (6), 531-41 (2007).

Water policy

Boundaries and Transboundary Water Conflicts — Olen Paul Matthews and Dan St. Germain; 133 (5), 386-96 (2007).

Transboundary Water Sharing and the Need for Public Management — Joseph W. Dellapenna; 133 (5), 397-404 (2007).

Impact of Climate Change on Transboundary Water Sharing — Stephen E. Draper and James E. Kundell; 133 (5), 405-15 (2007).

Administration and Institutional Provisions of Water Sharing Agreements — Stephen E. Draper; 133 (5), 446-55 (2007).

Water pollution

Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).

Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).

Water quality

Simulation of Operations and Water Quality Performance of Reservoir Multilevel Intake Configurations — Rakesh K. Gelda and Steven W. Effler; 133 (1), 78-86 (2007).

Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).

Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).

PhillyRiverCast: A Real-Time Bacteria Forecasting Model and Web Application for the Schuylkill River — Mark Maimone, Christopher S. Crockett, and William E. Cesanek; 133 (6), 542-9 (2007).

Planning for Water Allocation and Water Quality Using a Spreadsheet-Based Model — Garry L. Grabow and Peter G. McCornick; 133 (6), 560-4 (2007).

Water resources

Water Resources Management: Stewardship and Services — Harald D. Frederiksen; 133 (1), 15-22 (2007).

Influence of Inflows Modeling on Management Simulation of Water Resources System — J. C. Ochoa-Rivera, J. Andreu, and R. García-Bartual; 133 (2), 106-16 (2007).

Multilayer Control Hierarchy for Water Management Decisions in Integrated Hydrologic Simulation Model — Joseph Park, Jayantha Obeysekera, and Randy VanZee; 133 (2), 117-25 (2007).

Generating Alternatives Using Evolutionary Algorithms for Water Resources and Environmental Management Problems — Emily M. Zechman and Ranji S. Ranjithan; 133 (2), 156-65 (2007).

Direct Search Approaches Using Genetic Algorithms for Optimization of Water Reservoir Operating Policies — Sh. Momtahen and A. B. Dariane; 133 (3), 202-9 (2007).

Implementation of Pressure and Leakage Management Strategies on the Gold Coast, Australia: Case Study — Mark Girard and Rodney A. Stewart; 133 (3), 210-7 (2007).

Consideration of Climate Variability and Change in Agricultural Water Resources Planning — Kelly Brumbelow and Aris Georgakakos; 133 (3), 275-85 (2007).

Strategic Decision Support for Resolving Conflict over Water Sharing among Countries along the Syr Darya River in the Aral Sea Basin — K. D. W. Nandalal and K. W. Hipel; 133 (4), 289-99 (2007).

Managing Drought Impacts: Case Study of Mali, Africa — Zan N'Tio Traore and Darrell G. Fontane; 133 (4), 300-8 (2007).

Impact of Climate Change on Transboundary Water

Sharing — Stephen E. Draper and James E. Kundell; 133 (5), 405-15 (2007).

Sharing Water Resources Data in the Binational Rio Grande/Bravo Basin — Carlos Patiño-Gomez, Daene C. McKinney, and David R. Maidment; 133 (5), 416-26 (2007).

Integrated Water Resource Management and Water Sharing — Matthew D. Davis; 133 (5), 427-45 (2007).

Multiobjective Planning of Surface Water Resources by Multiobjective Genetic Algorithm with Constrained Differential Dynamic Programming — Chao-Chung Yang, Liang-Cheng Chang, Chao-Hsien Yeh, and Chang-Shian Chen; 133 (6), 499-508 (2007).

Planning for Water Allocation and Water Quality Using a Spreadsheet-Based Model — Garry L. Grabow and Peter G. McCornick; 133 (6), 560-4 (2007).

Water reuse

Planning for Water Allocation and Water Quality Using a Spreadsheet-Based Model — Garry L. Grabow and Peter G. McCornick; 133 (6), 560-4 (2007).

Water rights

Water Resources Management: Stewardship and Services — Harald D. Frederiksen; 133 (1), 15-22 (2007).

Mathematical Programming Approaches for Modeling Water Rights Allocation — Lizhong Wang, Liping Fang, and Keith W. Hipel; 133 (1), 50-9 (2007).

Simulation of Intra- or Transboundary Surface-Water-Rights Hierarchies Using the Farm Process for MODFLOW-2000 — Wolfgang Schmid and R. T. Hanson; 133 (2), 166-78 (2007).

Water shortage

Mathematical Programming Approaches for Modeling Water Rights Allocation — Lizhong Wang, Liping Fang, and Keith W. Hipel; 133 (1), 50-9 (2007).

Implementation of Pressure and Leakage Management Strategies on the Gold Coast, Australia: Case Study — Mark Girard and Rodney A. Stewart; 133 (3), 210-7 (2007).

Water supply

Water Sector Structure, Size, and Demographics — Neil S. Grigg; 133 (1), 60-6 (2007).

Using Neural Networks to Model the Impacts of Climate Change on Water Supplies — E. Elgaali and L. A. Garcia; 133 (3), 230-43 (2007).

Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).

Impact of Climate Change on Transboundary Water Sharing — Stephen E. Draper and James E. Kundell; 133 (5), 405-15 (2007).

North Carolina–Virginia Conflict: The Lake Gaston Water Transfer — William E. Cox; 133 (5), 456-61 (2007).

Water Supply Analysis for Restoring the Colorado River Delta, Mexico — Josué Medellín-Azuara, Jay R. Lund, and Richard E. Howitt; 133 (5), 462-71 (2007).

Water transfer

Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).

Water treatment

Locating Satellite Booster Disinfectant Stations — Kevin Lansey, Fayzul Pasha, Sheina Pool, Walid Elshorbagy, and James Uber; 133 (4), 372-6 (2007).

Water treatment plants

Vulnerability of Drinking Water Treatment Plants to Low Water Levels in the St. Lawrence River — A. Carrière, B. Barbeau, and J.-F. Cantin; 133 (1), 33-8 (2007).

Water use

Water Use Model for Quantifying Environmental and Economic Sustainability Indicators — Halla R. Sahely and Christopher A. Kennedy; 133 (6), 550-9 (2007).

Watershed management

Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).

Author Index

Adams, B. J.
Cross Correlation of Demands in Water Distribution Network Design — Yves Filion, Barry Adams, and Bryan Karney; 133 (2), 137-44 (2007).
Stochastic Design of Water Distribution Systems with Expected Annual Damages — Y. R. Filion, B. J. Adams, and B. W. Karney; 133 (3), 244-52 (2007).

Agrawal, Magan Lal
Reliability-Based Strengthening and Expansion of Water Distribution Networks — Magan Lal Agrawal, Rajesh Gupta, and Pramod R. Bhave; 133 (6), 531-41 (2007).

Aksoy, Aysegul
Calibration and Verification of QUAL2E Using Genetic Algorithm Optimization — Recep Kaya Goktas and Aysegul Aksoy; 133 (2), 126-36 (2007).

Andreu, J.
Influence of Inflows Modeling on Management Simulation of Water Resources System — J. C. Ochoa-Rivera, J. Andreu, and R. García-Bartual; 133 (2), 106-16 (2007).

Ang, Wah Khim
Closure to "Solution for Water Distribution Systems under Pressure-Deficient Conditions" by Wah Khim Ang and Paul W. Jowitt — Wah Khim Ang and Paul W. Jowitt; 133 (6), 571-2 (2007).

Atiquzzaman, Md.
Closure to "Alternate Decision Making in Water Distribution Network with NSGA-II" by Md. Atiquzzaman, Shie-Yui Liong, and Xinying Yu — Md. Atiquzzaman, Shie-Yui Liong, and Xinying Yu; 133 (6), 566 (2007).

Auer, Martin T.
Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Jr., Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).

Babayan, Artem V.
Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).

Banihani, Qais
Discussion of "Mixed-Integer Approach for Obtaining Unique Solutions in Source Inversion of Water Networks" by Carl D. Laird, Lorenz T. Biegler, and Bart G. van Bloemen Waanders — Kevin Lansey, David Delgado, and Qais Banihani; 133 (6), 573-5 (2007).

Barbeau, B.
Vulnerability of Drinking Water Treatment Plants to Low Water Levels in the St. Lawrence River — A. Carrière, B. Barbeau, and J.-F. Cantin; 133 (1), 33-8 (2007).

Baugh, John W., Jr.
Closure to "Optimal Design of Redundant Water Distribution Networks Using a Cluster of Workstations" by Sujay V. Kumar, Troy A. Doby, John W. Baugh Jr., E. Downey Brill, and S. Ranji Ranjithan — Sujay V. Kumar, Troy A. Doby, John W. Baugh, Jr., E. Downey Brill, and S. Ranji Ranjithan; 133 (6), 580-1 (2007).

Bhattacharjya, Rajib Kumar
Discussion of "Alternate Decision Making in Water Distribution Network with NSGA-II" by Md. Atiquzzaman, Shie-Yui Liong, and Xinying Yu — Rajib Kumar Bhattacharjya; 133 (6), 565-6 (2007).

Bhave, Pramod R.
Reliability-Based Strengthening and Expansion of Water Distribution Networks — Magan Lal Agrawal, Rajesh Gupta, and Pramod R. Bhave; 133 (6), 531-41 (2007).
Discussion of "Solution for Water Distribution Systems under Pressure-Deficient Conditions" by Wah Khim Ang and Paul W. Jowitt — Rajesh Gupta and Pramod R. Bhave; 133 (6), 568-9 (2007).
Discussion of "Optimal Design of Redundant Water Distribution Networks Using a Cluster of Workstations" by Sujay V. Kumar, Troy A. Doby, John W. Baugh Jr., E. Downey Brill and S. Ranji Ranjithan — Rajesh Gupta, Mahendra S. Kadu , and Pramod R. Bhave; 133 (6), 579-80 (2007).

Biegler, Lorenz T.
Closure to "Mixed-Integer Approach for Obtaining Unique Solutions in Source Inversion of Water Networks" by Carl D. Laird, Lorenz T. Biegler, and Bart G. van Bloemen Waanders — Carl D. Laird, Lorenz T. Biegler, and Bart G. van Bloemen Waanders; 133 (6), 575-8 (2007).

Boland, John J.
The Business of Water — John J. Boland; 133 (3), 189-91 (2007).

Borgatti, Douglas
Drought Management Planning with Economic and Risk Factors — Kirk S. Westphal, Richard L. Laramie, Douglas Borgatti, and Robert Stoops; 133 (4), 351-62 (2007).

Brill, E. Downey
Closure to "Optimal Design of Redundant Water Distribution Networks Using a Cluster of Workstations" by Sujay V. Kumar, Troy A. Doby, John W. Baugh Jr., E. Downey Brill, and S. Ranji Ranjithan — Sujay V. Kumar, Troy A. Doby, John W. Baugh, Jr., E. Downey Brill, and S. Ranji Ranjithan; 133 (6), 580-1 (2007).

Brumbelow, Kelly
Optimization and Assessment of Agricultural Water-Sharing Scenarios under Multiple Socioeconomic Objectives — Kelly Brumbelow and Aris Georgakakos; 133 (3), 264-74 (2007).
Consideration of Climate Variability and Change in Agricultural Water Resources Planning — Kelly Brumbelow and Aris Georgakakos; 133 (3), 275-85 (2007).

Burrows, Richard
Discussion of "Solution for Water Distribution Systems under Pressure-Deficient Conditions" by Wah Khim Ang and Paul W Jowitt — Muhamed Hayuti, Richard Burrows, and Devina Naga; 133 (6), 570 (2007).

Cantin, J.-F.
Vulnerability of Drinking Water Treatment Plants to Low Water Levels in the St. Lawrence River — A. Carrière, B. Barbeau, and J.-F. Cantin; 133 (1), 33-8 (2007).

Carrière, A.
Vulnerability of Drinking Water Treatment Plants to Low Water Levels in the St. Lawrence River — A. Carrière, B. Barbeau, and J.-F. Cantin; 133 (1), 33-8 (2007).

Cesanek, William E.
PhillyRiverCast: A Real-Time Bacteria Forecasting Model and Web Application for the Schuylkill River — Mark Maimone, Christopher S. Crockett, and William E. Cesanek; 133 (6), 542-9 (2007).

Chang, Liang-Cheng
Multiobjective Planning of Surface Water Resources by Multiobjective Genetic Algorithm with Constrained Differential Dynamic Programming — Chao-Chung Yang, Liang-Cheng Chang, Chao-Hsien Yeh, and Chang-Shian Chen; 133 (6), 499-508 (2007).

Chang, Yin-Lung
Stochastically Optimal Groundwater Management Considering Land Subsidence — Yin-Lung Chang, Tung-Lin Tsai, Jinn-Chuang Yang, and Yeou-Koung Tung; 133 (6), 486-98 (2007).

Characklis, Gregory W.
The Role of the Systems Community in the National Science Foundation's Environmental Observatories — Gregory W. Characklis, Patrick M. Reed, and Barbara S. Minsker; 133 (1), 1-3 (2007).

Chaves, Paulo
Stochastic Fuzzy Neural Network: Case Study of Optimal Reservoir Operation — Paulo Chaves and Toshiharu Kojiri; 133 (6), 509-18 (2007).

Chen, Chang-Shian
Multiobjective Planning of Surface Water Resources by Multiobjective Genetic Algorithm with Constrained Differential Dynamic Programming — Chao-Chung Yang, Liang-Cheng Chang, Chao-Hsien Yeh, and Chang-Shian Chen; 133 (6), 499-508 (2007).

Clark, Martyn
Water Management Applications of Climate-Based Hydrologic Forecasts: Case Study of the Truckee-Carson River Basin — Katrina Grantz, Balaji Rajagopalan, Edith Zagona, and Martyn Clark; 133 (4), 339-50 (2007).

Cox, William E.
North Carolina–Virginia Conflict: The Lake Gaston

Water Transfer — William E. Cox; 133 (5), 456-61 (2007).

Crockett, Christopher S.

PhillyRiverCast: A Real-Time Bacteria Forecasting Model and Web Application for the Schuylkill River — Mark Maimone, Christopher S. Crockett, and William E. Cesanek; 133 (6), 542-9 (2007).

Dariane, A. B.

Direct Search Approaches Using Genetic Algorithms for Optimization of Water Reservoir Operating Policies — Sh. Momtahen and A. B. Dariane; 133 (3), 202-9 (2007).

Datta, Bithin

Multiobjective Design of Dynamic Monitoring Networks for Detection of Groundwater Pollution — Anirban Dhar and Bithin Datta; 133 (4), 329-38 (2007).

Davis, Matthew D.

Integrated Water Resource Management and Water Sharing — Matthew D. Davis; 133 (5), 427-45 (2007).

Delgado, David

Discussion of "Mixed-Integer Approach for Obtaining Unique Solutions in Source Inversion of Water Networks" by Carl D. Laird, Lorenz T. Biegler, and Bart G. van Bloemen Waanders — Kevin Lansey, David Delgado, and Qais Banihani; 133 (6), 573-5 (2007).

Dellapenna, Joseph W.

Transboundary Water Sharing and the Need for Public Management — Joseph W. Dellapenna; 133 (5), 397-404 (2007).

Dhar, Anirban

Multiobjective Design of Dynamic Monitoring Networks for Detection of Groundwater Pollution — Anirban Dhar and Bithin Datta; 133 (4), 329-38 (2007).

Doby, Troy A.

Closure to "Optimal Design of Redundant Water Distribution Networks Using a Cluster of Workstations" by Sujay V. Kumar, Troy A. Doby, John W. Baugh Jr., E. Downey Brill, and S. Ranji Ranjithan — Sujay V. Kumar, Troy A. Doby, John W. Baugh, Jr., E. Downey Brill, and S. Ranji Ranjithan; 133 (6), 580-1 (2007).

Doerr O'Donnell, Susan M.

Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Jr., Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).

Draper, Stephen E.

Introduction to Transboundary Water Sharing — Stephen E. Draper; 133 (5), 377-81 (2007).

Impact of Climate Change on Transboundary Water Sharing — Stephen E. Draper and James E. Kundell; 133 (5), 405-15 (2007).

Administration and Institutional Provisions of Water Sharing Agreements — Stephen E. Draper; 133 (5), 446-55 (2007).

Effler, Steven W.

Simulation of Operations and Water Quality Performance of Reservoir Multilevel Intake Configurations — Rakesh K. Gelda and Steven W. Effler; 133 (1), 78-86 (2007).

Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Jr., Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).

Elgaali, E.

Using Neural Networks to Model the Impacts of Climate Change on Water Supplies — E. Elgaali and L. A. Garcia; 133 (3), 230-43 (2007).

Elshorbagy, Walid

Locating Satellite Booster Disinfectant Stations — Kevin Lansey, Fayzul Pasha, Sheina Pool, Walid Elshorbagy, and James Uber; 133 (4), 372-6 (2007).

Erickson, Andrew J.

Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).

Eum, Hyung-Il

Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).

Fang, Liping

Mathematical Programming Approaches for Modeling Water Rights Allocation — Lizhong Wang, Liping Fang, and Keith W. Hipel; 133 (1), 50-9 (2007).

Filion, Y. R.

Cross Correlation of Demands in Water Distribution Network Design — Yves Filion, Barry Adams, and Bryan Karney; 133 (2), 137-44 (2007).

Stochastic Design of Water Distribution Systems with Expected Annual Damages — Y. R. Filion, B. J. Adams, and B. W. Karney; 133 (3), 244-52 (2007).

Fontane, Darrell G.

Managing Drought Impacts: Case Study of Mali, Africa — Zan N'Tio Traore and Darrell G. Fontane; 133 (4), 300-8 (2007).

Frasier, Marshall

Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).

Frederiksen, Harald D.

Water Resources Management: Stewardship and Services — Harald D. Frederiksen; 133 (1), 15-22 (2007).

Fuller, Norma

Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).

Garcia, L. A.

Using Neural Networks to Model the Impacts of Climate Change on Water Supplies — E. Elgaali and L. A. Garcia; 133 (3), 230-43 (2007).

García-Bartual, R.

Influence of Inflows Modeling on Management Simulation of Water Resources System — J. C. Ochoa-Rivera, J. Andreu, and R. García-Bartual; 133 (2), 106-16 (2007).

Gato, Shirley

Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).

Gelda, Rakesh K.

Simulation of Operations and Water Quality Performance of Reservoir Multilevel Intake Configurations — Rakesh K. Gelda and Steven W. Effler; 133 (1), 78-86 (2007).

Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Jr., Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).

Georgakakos, Aris

Optimization and Assessment of Agricultural Water-Sharing Scenarios under Multiple Socioeconomic Objectives — Kelly Brumbelow and Aris Georgakakos; 133 (3), 264-74 (2007).

Consideration of Climate Variability and Change in Agricultural Water Resources Planning — Kelly Brumbelow and Aris Georgakakos; 133 (3), 275-85 (2007).

Germain, Dan St.

Boundaries and Transboundary Water Conflicts — Olen Paul Matthews and Dan St. Germain; 133 (5), 386-96 (2007).

Girard, Mark

Implementation of Pressure and Leakage Management Strategies on the Gold Coast, Australia: Case Study — Mark Girard and Rodney A. Stewart; 133 (3), 210-7 (2007).

Goktas, Recep Kaya

Calibration and Verification of QUAL2E Using Genetic Algorithm Optimization — Recep Kaya Goktas and Aysegul Aksoy; 133 (2), 126-36 (2007).

Grabow, Garry L.

Planning for Water Allocation and Water Quality Using a Spreadsheet-Based Model — Garry L. Grabow and Peter G. McCornick; 133 (6), 560-4 (2007).

Grantz, Katrina

Water Management Applications of Climate-Based Hydrologic Forecasts: Case Study of the Truckee-Carson River Basin — Katrina Grantz, Balaji Rajagopalan, Edith Zagona, and Martyn Clark; 133 (4), 339-50 (2007).

Grigg, Neil S.

Water Sector Structure, Size, and Demographics — Neil S. Grigg; 133 (1), 60-6 (2007).

Gulliver, John S.

Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).

Gupta, Rajesh

Reliability-Based Strengthening and Expansion of Water Distribution Networks — Magan Lal Agrawal, Rajesh Gupta, and Pramod R. Bhave; 133 (6), 531-41 (2007).

Discussion of "Solution for Water Distribution Systems under Pressure-Deficient Conditions" by Wah Khim Ang and Paul W. Jowitt — Rajesh Gupta and Pramod R. Bhave; 133 (6), 568-9 (2007).

Discussion of "Optimal Design of Redundant Water Distribution Networks Using a Cluster of Workstations" by Sujay V. Kumar, Troy A. Doby, John W. Baugh Jr., E. Downey Brill and S. Ranji Ranjithan — Rajesh Gupta, Mahendra S. Kadu , and Pramod R. Bhave; 133 (6), 579-80 (2007).

Hanson, R. T.

Simulation of Intra- or Transboundary Surface-Water-Rights Hierarchies Using the Farm Process for MODFLOW-2000 — Wolfgang Schmid

and R. T. Hanson; 133 (2), 166-78 (2007).

Hayuti, Muhamed

Discussion of "Solution for Water Distribution Systems under Pressure-Deficient Conditions" by Wah Khim Ang and Paul W Jowitt — Muhamed Hayuti, Richard Burrows, and Devina Naga; 133 (6), 570 (2007).

Hipel, K. W.

Mathematical Programming Approaches for Modeling Water Rights Allocation — Lizhong Wang, Liping Fang, and Keith W. Hipel; 133 (1), 50-9 (2007).

Strategic Decision Support for Resolving Conflict over Water Sharing among Countries along the Syr Darya River in the Aral Sea Basin — K. D. W. Nandalal and K. W. Hipel; 133 (4), 289-99 (2007).

Houk, Eric E.

Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).

Howitt, Richard E.

Water Supply Analysis for Restoring the Colorado River Delta, Mexico — Josué Medellín-Azuara, Jay R. Lund, and Richard E. Howitt; 133 (5), 462-71 (2007).

Huang, Gordon

Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).

Janga Reddy, M.

Multipurpose Reservoir Operation Using Particle Swarm Optimization — D. Nagesh Kumar and M. Janga Reddy; 133 (3), 192-201 (2007).

Jayasuriya, Niranjali

Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).

Jowitt, Paul W.

Closure to "Solution for Water Distribution Systems under Pressure-Deficient Conditions" by Wah Khim Ang and Paul W. Jowitt — Wah Khim Ang and Paul W. Jowitt; 133 (6), 571-2 (2007).

Jun, Hwandon

Valve-Controlled Segments in Water Distribution Systems — Hwandon Jun and G. V. Loganathan; 133 (2), 145-55 (2007).

Kadu, Mahendra S.

Discussion of "Optimal Design of Redundant Water Distribution Networks Using a Cluster of Workstations" by Sujay V. Kumar, Troy A. Doby, John W. Baugh Jr., E. Downey Brill and S. Ranji Ranjithan — Rajesh Gupta, Mahendra S. Kadu , and Pramod R. Bhave; 133 (6), 579-80 (2007).

Kahler, J.

Dynamic Optimization Approach for Solving an Optimal Scheduling Problem in Water Distribution Systems — B. Ulanicki, J. Kahler, and H. See; 133 (1), 23-32 (2007).

Kapelan, Zoran S.

Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).

Karatzas, George P.

Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).

Karney, B. W.

Cross Correlation of Demands in Water Distribution Network Design — Yves Filion, Barry Adams, and Bryan Karney; 133 (2), 137-44 (2007).

Stochastic Design of Water Distribution Systems with Expected Annual Damages — Y. R. Filion, B. J. Adams, and B. W. Karney; 133 (3), 244-52 (2007).

Kennedy, Christopher A.

Water Use Model for Quantifying Environmental and Economic Sustainability Indicators — Halla R. Sahely and Christopher A. Kennedy; 133 (6), 550-9 (2007).

Kim, Young-Oh

Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).

Ko, Ick Hwan

Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).

Kojiri, Toshiharu

Stochastic Fuzzy Neural Network: Case Study of Optimal Reservoir Operation — Paulo Chaves and Toshiharu Kojiri; 133 (6), 509-18 (2007).

Kumar, Sujay V.

Closure to "Optimal Design of Redundant Water Distribution Networks Using a Cluster of Workstations" by Sujay V. Kumar, Troy A. Doby, John W. Baugh Jr., E. Downey Brill, and S. Ranji Ranjithan — Sujay V. Kumar, Troy A. Doby, John W. Baugh, Jr., E. Downey Brill, and S. Ranji Ranjithan; 133 (6), 580-1 (2007).

Kundell, James E.

Impact of Climate Change on Transboundary Water Sharing — Stephen E. Draper and James E. Kundell; 133 (5), 405-15 (2007).

Laird, Carl D.

Closure to "Mixed-Integer Approach for Obtaining Unique Solutions in Source Inversion of Water Networks" by Carl D. Laird, Lorenz T. Biegler, and Bart G. van Bloemen Waanders — Carl D. Laird, Lorenz T. Biegler, and Bart G. van Bloemen Waanders; 133 (6), 575-8 (2007).

Lambert, Martin F.

Experimental Observation and Analysis of Inverse Transients for Pipeline Leak Detection — John P. Vítkovský, Martin F. Lambert, Angus R. Simpson, and James A. Liggett; 133 (6), 519-30 (2007).

Lansey, Kevin

Locating Satellite Booster Disinfectant Stations — Kevin Lansey, Fayzul Pasha, Sheina Pool, Walid Elshorbagy, and James Uber; 133 (4), 372-6 (2007).

Discussion of "Mixed-Integer Approach for Obtaining Unique Solutions in Source Inversion of Water Networks" by Carl D. Laird, Lorenz T. Biegler, and Bart G. van Bloemen Waanders — Kevin Lansey, David Delgado, and Qais Banihani; 133 (6), 573-5 (2007).

Laramie, Richard L.

Drought Management Planning with Economic and Risk Factors — Kirk S. Westphal, Richard L. Laramie, Douglas Borgatti, and Robert Stoops; 133 (4), 351-62 (2007).

Lee, Eun-Goo

Optimizing Operational Policies of a Korean Multireservoir System Using Sampling Stochastic Dynamic Programming with Ensemble Streamflow Prediction — Young-Oh Kim, Hyung-Il Eum, Eun-Goo Lee, and Ick Hwan Ko; 133 (1), 4-14 (2007).

Leonard, Michael

Ant Colony Optimization Applied to Water Distribution System Design: Comparative Study of Five Algorithms — Aaron C. Zecchin, Holger R. Maier, Angus R. Simpson, Michael Leonard, and John B. Nixon; 133 (1), 87-92 (2007).

Liggett, James A.

Experimental Observation and Analysis of Inverse Transients for Pipeline Leak Detection — John P. Vítkovský, Martin F. Lambert, Angus R. Simpson, and James A. Liggett; 133 (6), 519-30 (2007).

Liong, Shie-Yui

Closure to "Alternate Decision Making in Water Distribution Network with NSGA-II" by Md. Atiquzzaman, Shie-Yui Liong, and Xinying Yu — Md. Atiquzzaman, Shie-Yui Liong, and Xinying Yu; 133 (6), 566 (2007).

Loganathan, G. V.

Valve-Controlled Segments in Water Distribution Systems — Hwandon Jun and G. V. Loganathan; 133 (2), 145-55 (2007).

Lund, Jay R.

Water Supply Analysis for Restoring the Colorado River Delta, Mexico — Josué Medellín-Azuara, Jay R. Lund, and Richard E. Howitt; 133 (5), 462-71 (2007).

Maidment, David R.

Sharing Water Resources Data in the Binational Rio Grande/Bravo Basin — Carlos Patiño-Gomez, Daene C. McKinney, and David R. Maidment; 133 (5), 416-26 (2007).

Maier, Holger R.

Ant Colony Optimization Applied to Water Distribution System Design: Comparative Study of Five Algorithms — Aaron C. Zecchin, Holger R. Maier, Angus R. Simpson, Michael Leonard, and John B. Nixon; 133 (1), 87-92 (2007).

Maimone, Mark

PhillyRiverCast: A Real-Time Bacteria Forecasting Model and Web Application for the Schuylkill River — Mark Maimone, Christopher S. Crockett, and William E. Cesanek; 133 (6), 542-9 (2007).

Maqsood, Imran

Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).

Matthews, Olen Paul

Boundaries and Transboundary Water Conflicts — Olen Paul Matthews and Dan St. Germain; 133 (5), 386-96 (2007).

McCornick, Peter G.
Planning for Water Allocation and Water Quality Using a Spreadsheet-Based Model — Garry L. Grabow and Peter G. McCornick; 133 (6), 560-4 (2007).
McKinney, Daene C.
Sharing Water Resources Data in the Binational Rio Grande/Bravo Basin — Carlos Patiño-Gomez, Daene C. McKinney, and David R. Maidment; 133 (5), 416-26 (2007).
Medellín-Azuara, Josué
Water Supply Analysis for Restoring the Colorado River Delta, Mexico — Josué Medellín-Azuara, Jay R. Lund, and Richard E. Howitt; 133 (5), 462-71 (2007).
Minsker, Barbara S.
The Role of the Systems Community in the National Science Foundation's Environmental Observatories — Gregory W. Characklis, Patrick M. Reed, and Barbara S. Minsker; 133 (1), 1-3 (2007).
Momtahen, Sh.
Direct Search Approaches Using Genetic Algorithms for Optimization of Water Reservoir Operating Policies — Sh. Momtahen and A. B. Dariane; 133 (3), 202-9 (2007).
Mondal, M. Shahjahan
Evaluation of Risk-Related Performance in Water Management for the Ganges Delta of Bangladesh — M. Shahjahan Mondal and Saleh A. Wasimi; 133 (2), 179-87 (2007).
Naga, Devina
Discussion of "Solution for Water Distribution Systems under Pressure-Deficient Conditions" by Wah Khim Ang and Paul W Jowitt — Muhamed Hayuti, Richard Burrows, and Devina Naga; 133 (6), 570 (2007).
Nagesh Kumar, D.
Multipurpose Reservoir Operation Using Particle Swarm Optimization — D. Nagesh Kumar and M. Janga Reddy; 133 (3), 192-201 (2007).
Nandalal, K. D. W.
Strategic Decision Support for Resolving Conflict over Water Sharing among Countries along the Syr Darya River in the Aral Sea Basin — K. D. W. Nandalal and K. W. Hipel; 133 (4), 289-99 (2007).
Nasiri, Fuzhan
Water Quality Index: A Fuzzy River-Pollution Decision Support Expert System — Fuzhan Nasiri, Imran Maqsood, Gordon Huang, and Norma Fuller; 133 (2), 95-105 (2007).
Nixon, John B.
Ant Colony Optimization Applied to Water Distribution System Design: Comparative Study of Five Algorithms — Aaron C. Zecchin, Holger R. Maier, Angus R. Simpson, Michael Leonard, and John B. Nixon; 133 (1), 87-92 (2007).
Obeysekera, Jayantha
Multilayer Control Hierarchy for Water Management Decisions in Integrated Hydrologic Simulation Model — Joseph Park, Jayantha Obeysekera, and Randy VanZee; 133 (2), 117-25 (2007).
Ochoa-Rivera, J. C.
Influence of Inflows Modeling on Management Simulation of Water Resources System — J. C. Ochoa-Rivera, J. Andreu, and R. García-Bartual; 133 (2), 106-16 (2007).
Palmer, Richard N.
The Confluence of a Career: Virtual Droughts, Shared-Vision Planning, and Climate Change — Richard N. Palmer; 133 (4), 287-8 (2007).
Park, Joseph
Multilayer Control Hierarchy for Water Management Decisions in Integrated Hydrologic Simulation Model — Joseph Park, Jayantha Obeysekera, and Randy VanZee; 133 (2), 117-25 (2007).
Pasha, Fayzul
Locating Satellite Booster Disinfectant Stations — Kevin Lansey, Fayzul Pasha, Sheina Pool, Walid Elshorbagy, and James Uber; 133 (4), 372-6 (2007).
Patiño-Gomez, Carlos
Sharing Water Resources Data in the Binational Rio Grande/Bravo Basin — Carlos Patiño-Gomez, Daene C. McKinney, and David R. Maidment; 133 (5), 416-26 (2007).
Phelps, Don
Water and Conflict: Historical Perspective — Don Phelps; 133 (5), 382-5 (2007).
Pinder, George F.
Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).
Pool, Sheina
Locating Satellite Booster Disinfectant Stations — Kevin Lansey, Fayzul Pasha, Sheina Pool, Walid Elshorbagy, and James Uber; 133 (4), 372-6 (2007).
Rajagopalan, Balaji
Water Management Applications of Climate-Based Hydrologic Forecasts: Case Study of the Truckee-Carson River Basin — Katrina Grantz, Balaji Rajagopalan, Edith Zagona, and Martyn Clark; 133 (4), 339-50 (2007).
Ranjithan, S. Ranji
Generating Alternatives Using Evolutionary Algorithms for Water Resources and Environmental Management Problems — Emily M. Zechman and Ranji S. Ranjithan; 133 (2), 156-65 (2007).
Closure to "Optimal Design of Redundant Water Distribution Networks Using a Cluster of Workstations" by Sujay V. Kumar, Troy A. Doby, John W. Baugh Jr., E. Downey Brill, and S. Ranji Ranjithan — Sujay V. Kumar, Troy A. Doby, John W. Baugh, Jr., E. Downey Brill, and S. Ranji Ranjithan; 133 (6), 580-1 (2007).
Reed, Patrick M.
The Role of the Systems Community in the National Science Foundation's Environmental Observatories — Gregory W. Characklis, Patrick M. Reed, and Barbara S. Minsker; 133 (1), 1-3 (2007).
Ricciardi, Karen L.
Efficient Groundwater Remediation System Design Subject to Uncertainty Using Robust Optimization — Karen L. Ricciardi, George F. Pinder, and George P. Karatzas; 133 (3), 253-63 (2007).
Roberts, Peter
Forecasting Residential Water Demand: Case Study — Shirley Gato, Niranjali Jayasuriya, and Peter Roberts; 133 (4), 309-19 (2007).
Rosenberg, David E.
Probabilistic Estimation of Water Conservation Effectiveness — David E. Rosenberg; 133 (1), 39-49 (2007).
Rossman, Lewis A.
Discussion of "Solution for Water Distribution Systems under Pressure-Deficient Conditions" by Wah Khim Ang and Paul W. Jowitt — Lewis A. Rossman; 133 (6), 566-7 (2007).
Rucinski, Daniel K.
Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Jr., Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).
Sahely, Halla R.
Water Use Model for Quantifying Environmental and Economic Sustainability Indicators — Halla R. Sahely and Christopher A. Kennedy; 133 (6), 550-9 (2007).
Savic, Dragan A.
Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).
Schmid, Wolfgang
Simulation of Intra- or Transboundary Surface-Water-Rights Hierarchies Using the Farm Process for MODFLOW-2000 — Wolfgang Schmid and R. T. Hanson; 133 (2), 166-78 (2007).
See, H.
Dynamic Optimization Approach for Solving an Optimal Scheduling Problem in Water Distribution Systems — B. Ulanicki, J. Kahler, and H. See; 133 (1), 23-32 (2007).
Shang, Feng
Calibrating Pipe Wall Demand Coefficient for Chlorine Decay in Water Distribution System — Feng Shang and James G. Uber; 133 (4), 363-71 (2007).
Simpson, Angus R.
Ant Colony Optimization Applied to Water Distribution System Design: Comparative Study of Five Algorithms — Aaron C. Zecchin, Holger R. Maier, Angus R. Simpson, Michael Leonard, and John B. Nixon; 133 (1), 87-92 (2007).
Experimental Observation and Analysis of Inverse Transients for Pipeline Leak Detection — John P. Vítkovský, Martin F. Lambert, Angus R. Simpson, and James A. Liggett; 133 (6), 519-30 (2007).
Stewart, Rodney A.
Implementation of Pressure and Leakage Management Strategies on the Gold Coast, Australia: Case Study — Mark Girard and Rodney A. Stewart; 133 (3), 210-7 (2007).
Stoops, Robert
Drought Management Planning with Economic and Risk Factors — Kirk S. Westphal, Richard L. Laramie, Douglas Borgatti, and Robert Stoops; 133 (4), 351-62 (2007).
Taylor, R. G.
Evaluating Water Transfers from Agriculture for Reducing Critical Habitat Water Shortages in the Platte Basin — Eric E. Houk, Marshall Frasier, and R. G. Taylor; 133 (4), 320-8 (2007).
Traore, Zan N'Tio
Managing Drought Impacts: Case Study of Mali, Africa — Zan N'Tio Traore and Darrell G. Fontane; 133 (4), 300-8 (2007).

Tsai, Tung-Lin
Stochastically Optimal Groundwater Management Considering Land Subsidence — Yin-Lung Chang, Tung-Lin Tsai, Jinn-Chuang Yang, and Yeou-Koung Tung; 133 (6), 486-98 (2007).
Tung, Yeou-Koung
Stochastically Optimal Groundwater Management Considering Land Subsidence — Yin-Lung Chang, Tung-Lin Tsai, Jinn-Chuang Yang, and Yeou-Koung Tung; 133 (6), 486-98 (2007).
Uber, James G.
Calibrating Pipe Wall Demand Coefficient for Chlorine Decay in Water Distribution System — Feng Shang and James G. Uber; 133 (4), 363-71 (2007).
Locating Satellite Booster Disinfectant Stations — Kevin Lansey, Fayzul Pasha, Sheina Pool, Walid Elshorbagy, and James Uber; 133 (4), 372-6 (2007).
Ulanicki, B.
Dynamic Optimization Approach for Solving an Optimal Scheduling Problem in Water Distribution Systems — B. Ulanicki, J. Kahler, and H. See; 133 (1), 23-32 (2007).
van Bloemen Waanders, Bart G.
Closure to "Mixed-Integer Approach for Obtaining Unique Solutions in Source Inversion of Water Networks" by Carl D. Laird, Lorenz T. Biegler, and Bart G. van Bloemen Waanders — Carl D. Laird, Lorenz T. Biegler, and Bart G. van Bloemen Waanders; 133 (6), 575-8 (2007).
VanZee, Randy
Multilayer Control Hierarchy for Water Management Decisions in Integrated Hydrologic Simulation Model — Joseph Park, Jayantha Obeysekera, and Randy VanZee; 133 (2), 117-25 (2007).
Vítkovský, John P.
Experimental Observation and Analysis of Inverse Transients for Pipeline Leak Detection — John P. Vítkovský, Martin F. Lambert, Angus R. Simpson, and James A. Liggett; 133 (6), 519-30 (2007).
Walski, Thomas M.
Journal Reviews Should Count toward Continuing Education — Thomas M. Walski; 133 (6), 473 (2007).
Walters, Godfrey A.
Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integration-Based Methodologies — Artem V. Babayan, Dragan A. Savic, Godfrey A. Walters, and Zoran S. Kapelan; 133 (1), 67-77 (2007).
Wang, Lizhong
Mathematical Programming Approaches for Modeling Water Rights Allocation — Lizhong Wang, Liping Fang, and Keith W. Hipel; 133 (1), 50-9 (2007).
Wasimi, Saleh A.
Evaluation of Risk-Related Performance in Water Management for the Ganges Delta of Bangladesh — M. Shahjahan Mondal and Saleh A. Wasimi; 133 (2), 179-87 (2007).
Watkins, David W., Jr.
Case for Case Studies in Water Resources Planning and Management Education — David Watkins; 133 (2), 93-4 (2007).
Accessing Assimilative Capacity through a Dual Discharge Approach — Daniel K. Rucinski, Martin T. Auer, David W. Watkins, Jr., Steven W. Effler, Susan M. Doerr O'Donnell, and Rakesh K. Gelda; 133 (6), 474-85 (2007).
Weiss, Peter T.
Cost and Pollutant Removal of Storm-Water Treatment Practices — Peter T. Weiss, John S. Gulliver, and Andrew J. Erickson; 133 (3), 218-29 (2007).
Westphal, Kirk S.
Drought Management Planning with Economic and Risk Factors — Kirk S. Westphal, Richard L. Laramie, Douglas Borgatti, and Robert Stoops; 133 (4), 351-62 (2007).
Wu, Zheng Yi
Discussion of "Solution for Water Distribution Systems under Pressure-Deficient Conditions" by Wah Khim Ang and Paul W. Jowitt — Zheng Yi Wu; 133 (6), 567-8 (2007).
Yang, Chao-Chung
Multiobjective Planning of Surface Water Resources by Multiobjective Genetic Algorithm with Constrained Differential Dynamic Programming — Chao-Chung Yang, Liang-Cheng Chang, Chao-Hsien Yeh, and Chang-Shian Chen; 133 (6), 499-508 (2007).
Yang, Jinn-Chuang
Stochastically Optimal Groundwater Management Considering Land Subsidence — Yin-Lung Chang, Tung-Lin Tsai, Jinn-Chuang Yang, and Yeou-Koung Tung; 133 (6), 486-98 (2007).
Yeh, Chao-Hsien
Multiobjective Planning of Surface Water Resources by Multiobjective Genetic Algorithm with Constrained Differential Dynamic Programming — Chao-Chung Yang, Liang-Cheng Chang, Chao-Hsien Yeh, and Chang-Shian Chen; 133 (6), 499-508 (2007).
Yu, Xinying
Closure to "Alternate Decision Making in Water Distribution Network with NSGA-II" by Md. Atiquzzaman, Shie-Yui Liong, and Xinying Yu — Md. Atiquzzaman, Shie-Yui Liong, and Xinying Yu; 133 (6), 566 (2007).
Zagona, Edith
Water Management Applications of Climate-Based Hydrologic Forecasts: Case Study of the Truckee-Carson River Basin — Katrina Grantz, Balaji Rajagopalan, Edith Zagona, and Martyn Clark; 133 (4), 339-50 (2007).
Zecchin, Aaron C.
Ant Colony Optimization Applied to Water Distribution System Design: Comparative Study of Five Algorithms — Aaron C. Zecchin, Holger R. Maier, Angus R. Simpson, Michael Leonard, and John B. Nixon; 133 (1), 87-92 (2007).
Zechman, Emily M.
Generating Alternatives Using Evolutionary Algorithms for Water Resources and Environmental Management Problems — Emily M. Zechman and Ranji S. Ranjithan; 133 (2), 156-65 (2007).